

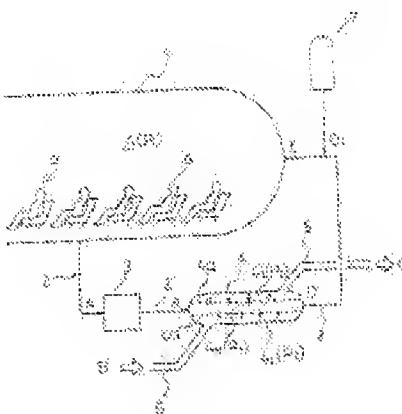
**AIR REGENERATING DEVICE FOR AIRCRAFT****Publication number:** JP3061198 (A)**Publication date:** 1991-03-15**Inventor(s):** HAYASHI MUNEHIRO; SAITO HIDEFUMI +**Applicant(s):** SHIMADZU CORP +**Classification:**- international: **B64D13/00; B64D13/02; B64D13/00;** (IPC1-7): B64D13/00

- European:

**Application number:** JP19890197374 19890729**Priority number(s):** JP19890197374 19890729**Also published as:** JP2737281 (B2)**Abstract of JP 3061198 (A)**

**PURPOSE:** To reduce the amount of consumption of O<sub>2</sub> cylinders by separating the circulating air inside an aircraft into a high CO<sub>2</sub> concentration air and a low CO<sub>2</sub> concentration air, and by introducing ram air into the high CO<sub>2</sub> concentration air, so that the high CO<sub>2</sub> concentration air can be discharged by the ram air to the outside of the aircraft.

**CONSTITUTION:** The air inside a cabin 1 is sent to a separator 4 through a circulating passage 2 via a filter 3. In the separator 4, only CO<sub>2</sub> is permeated by a separation membrane 4a having a larger CO<sub>2</sub> permeability and a lower O<sub>2</sub> permeability to separate a high O<sub>2</sub> concentration air from a high CO<sub>2</sub> concentration air. And, by introducing ram air B into the low-pressure side 4L having a high CO<sub>2</sub> concentration through an outside-air introducing passage 6, the high CO<sub>2</sub> concentration air is discharged by the ram air B to the outside of the aircraft through a discharge passage 5. On the other hand, the high O<sub>2</sub> concentration air on the high-pressure side is supplied with O<sub>2</sub> from a cylinder 7 in the circulating passage 2, and then is returned to the cabin 1. By this constitution, the amount of consumption of O<sub>2</sub> cylinders can be reduced.

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